Configuration Management in the FAA

Briefing to NAS CCB

20 July 1999

Objectives

This is an ADMINISTRATIVE CCB. No NCPs will be considered.

- ***Provide the latest information on CM and the NAS CCB***
- ***Discuss and reach agreement on the framework for the NAS CCB Charter & Operating Procedures***
- ***Discuss the NAS Technical Architecture and relationship to the NAS CCB***

Configuration Management

When properly applied, CM is used to help us:

- Manage change and assess impacts of proposed changes
- Provide a mechanism to know:

What we are supposed to build

What we are building

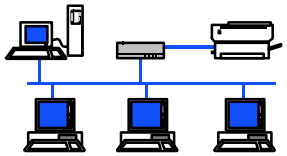
What we have built

- So that we can:

Support it

Modify it

Build more like it



or Interface to it

A System Engineering discipline that must span the life-cycle to be effective

Historical Perspective

1980's - Centralized NAS Systems Engineering

- NAS Modernization Plan
- FAA Order 1800.8 - CM Policy- Roles & Responsibilities
- NAS 1000 Series - Technical Requirements
- FAA Order 1800.57 - established NAS CCB & CI's

1990's - Acquisition Reform

- IPDS - established IPTs
- AMS - designed to "replace" all acquisition orders (e.g., 1800.8)
- NAS Architecture
- CM BPR - consistent with AMS & IPDS

1997-99 - Unifying Agency CM Practices

- CM Steering Group to provide strategic direction
- In the interest of ARA and ATS
- National Policy, Process and Procedures established

Core CM Implementation Groups

CMSG

a chartered, Agency-wide forum of senior managers dedicated to the establishment and promotion of an integrated FAA CM discipline that supports the FAA mission.

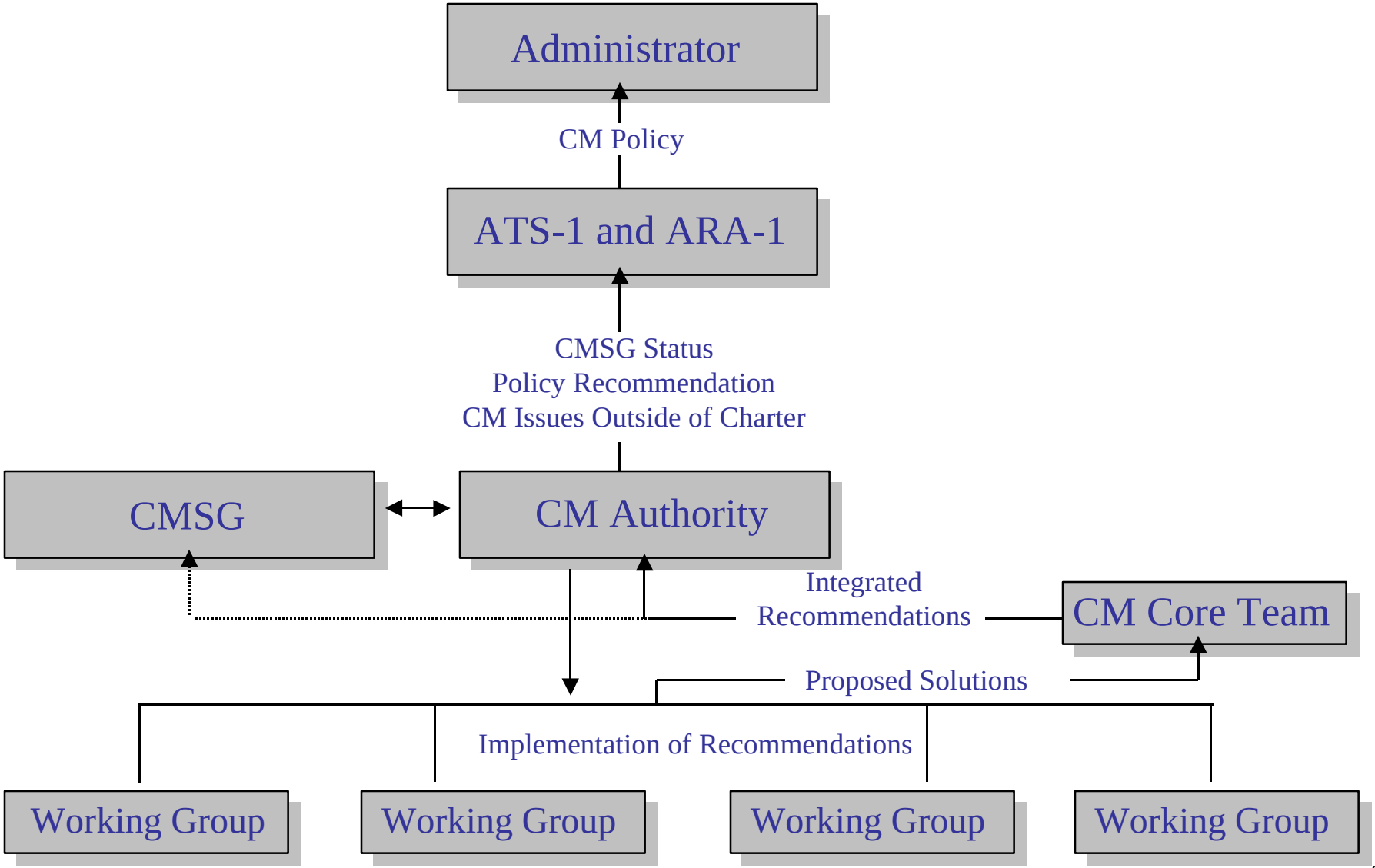
CM Core Team

CM practitioners sponsored by the CMSG to help realize the strategic FAA CM Vision through Agency CM Program Planning.

CM Working Groups

CM practitioners who provide subject matter expertise for the implementation of an enhanced Agency CM program.

Organizational Structure



CMSG Membership

Initial

R. Wein	ASD-200
R. Long	ANS-2
A. Douglas	ARX-1
A. Wong	ARN-1
T. Carrico	AIT-2
J. Loewenstein	AND-400
J. Hmara	AND-100
T. Hudson	AOS-2
N. Graham	AUA-600
D. Ford	AUA-300
M. Harrison	ASD-102
J. Heinen	ANI-7

Common Agreement

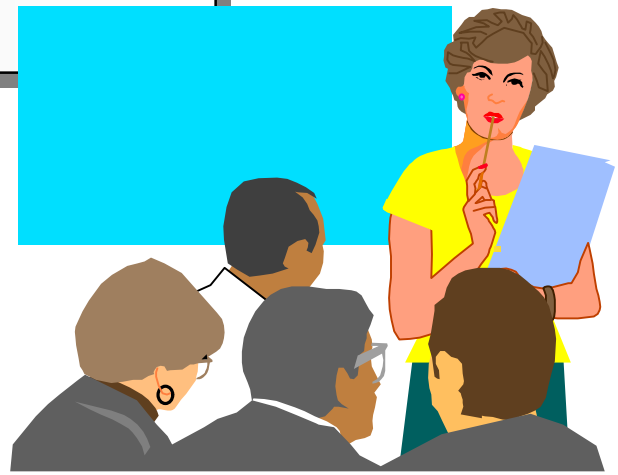
Broader Role Needed

R. Wein	ASD-200
T. Gassert	AOP-1
J. Griffith	ATO-1
M. Hoover	ARU-1
J. Justiniano	ARX-1
R. Long	ANS-1
J. Nager	ANI-1
T. Hudson	AOS-1
A. Wong	ARN-1
N. Bowles	AML-1
C. Keegan	AOZ-1
R. Varette	AIR-500
J. Williams	ACE-470
D. Buckanin	ACT-300
A. Feinberg	AND-300
D. Ford	AND-500
N. Graham	AUA-600
M. Harrison	ASD-100
J. Wiley (acting)	AUA-300
J. Link	AND-400
J. Loewenstein	AND-700
N. Chapman (acting)	AUA-200
R. Polillo	AAR-600
A. Pyster	AIO-2
D. Stadtler	AUA-400
J. Wiley	ACT-200

(7/20/99)

CM Core Team Membership

Rebecca T. King	ASD-220 (Lead)
Don Lombard	ANS-100
Bob Pfoff	AUA-240
Charles Gould	AND-400
Nancy Wigal	AOP-3
Rich Acosta	ARX-100
Jack Phillips	ARX-100
Mark Levy	ANI-5
Guy Hawkes	AOP-1000



What do we need to make CM work?

A Single, Agency CM Approach

➡ **Integral to Operations, Maintenance and Acquisition**

Single

Organization Responsible for CM, Reporting to ATS and ARA

Consistent

and Balanced Application of Process and Policy

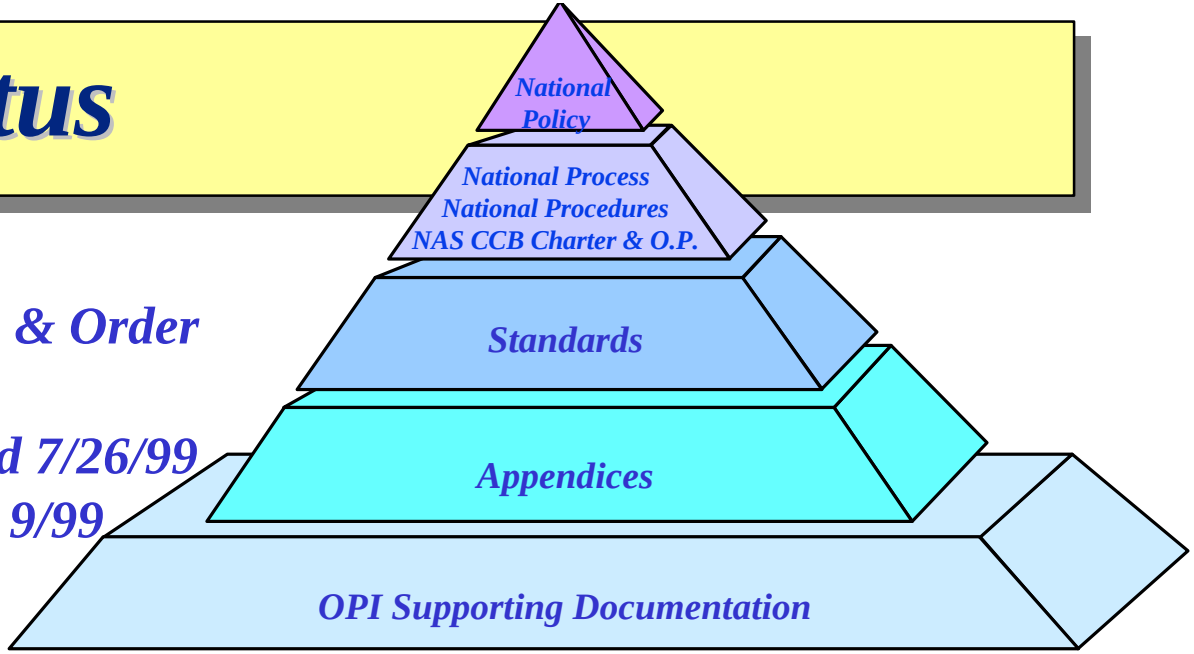
Skilled

Workforce and Technology to Effectively Perform CM

Commitment

from Associates and all levels of the organization

Policy Status



- **Policy** *represented in AMS & Order*
- *Clearance Record review*
  - *–ASAG approval expected 7/26/99*
  - *–Administrator Approval 9/99*

- **Process** *developed by cross functional Working group*
  - *–Endorsed by CMCT & CMSG*
  - *–Will be placed on FAST and in Order*

- **Procedures** *to be completed by 12/99*
  - *–Will be placed on FAST and in Order*

- **NAS CCB Charter & Operating Procedures**
  - *–Ready for Review & Approval*

Next Steps

- *Obtain Policy approval and implement*
- *Develop and implement National Procedures*
- *Complete CM Program Plan*
- *Establish/Implement new organization for CM*
- *Obtain approval of NAS CCB Charter & Operating Procedures*

Change Control Board (CCB) Structure

NAS CCB

- NAS Systems Rqmts(SR-1000)
- NAS Technical Architecture
  - Requirements Data Base
  - Subsystem Architecture
- Interface Control Documents

- CCB Charter Approval
- Standards
- Interface Requirements Document
- Final Requirements Documents (fRD)

Life Cycle Support CCBs:

PSF

AND 300

AND 400

AND* 500

AND 700

AUA 300

AOZ* 1

AUA 400

AUA 200

AUA 600

- Power Cond. Sys.
- E/G
- UPS
- Facilities

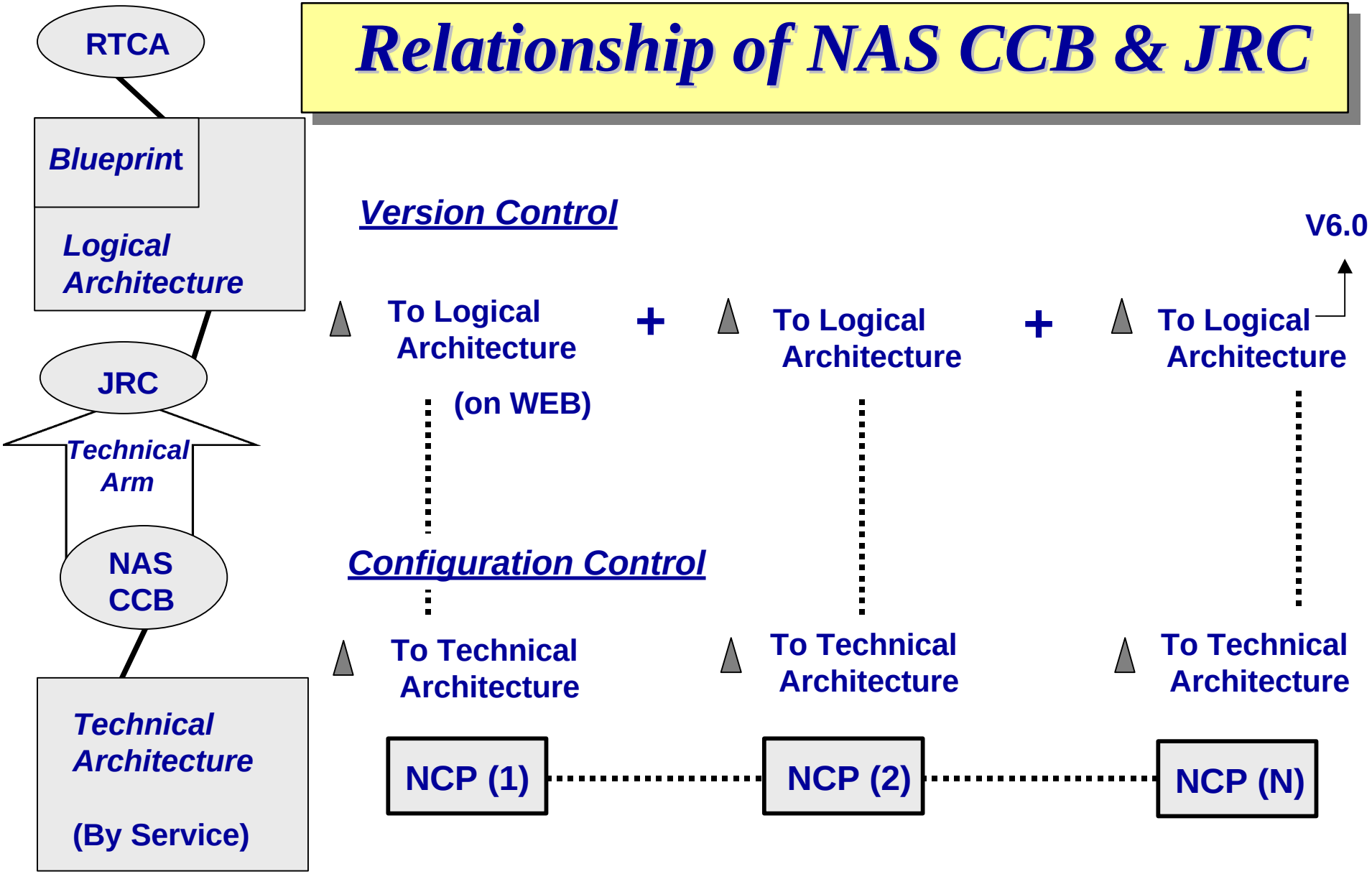
Regional

- ATCT/TRACON As-Built Drawings
- AFSS As-Built Drawings
- ARTCC Drawings
- Changes to Critical Power Panels
- Documentation Describing
- Region-Unique Equipment

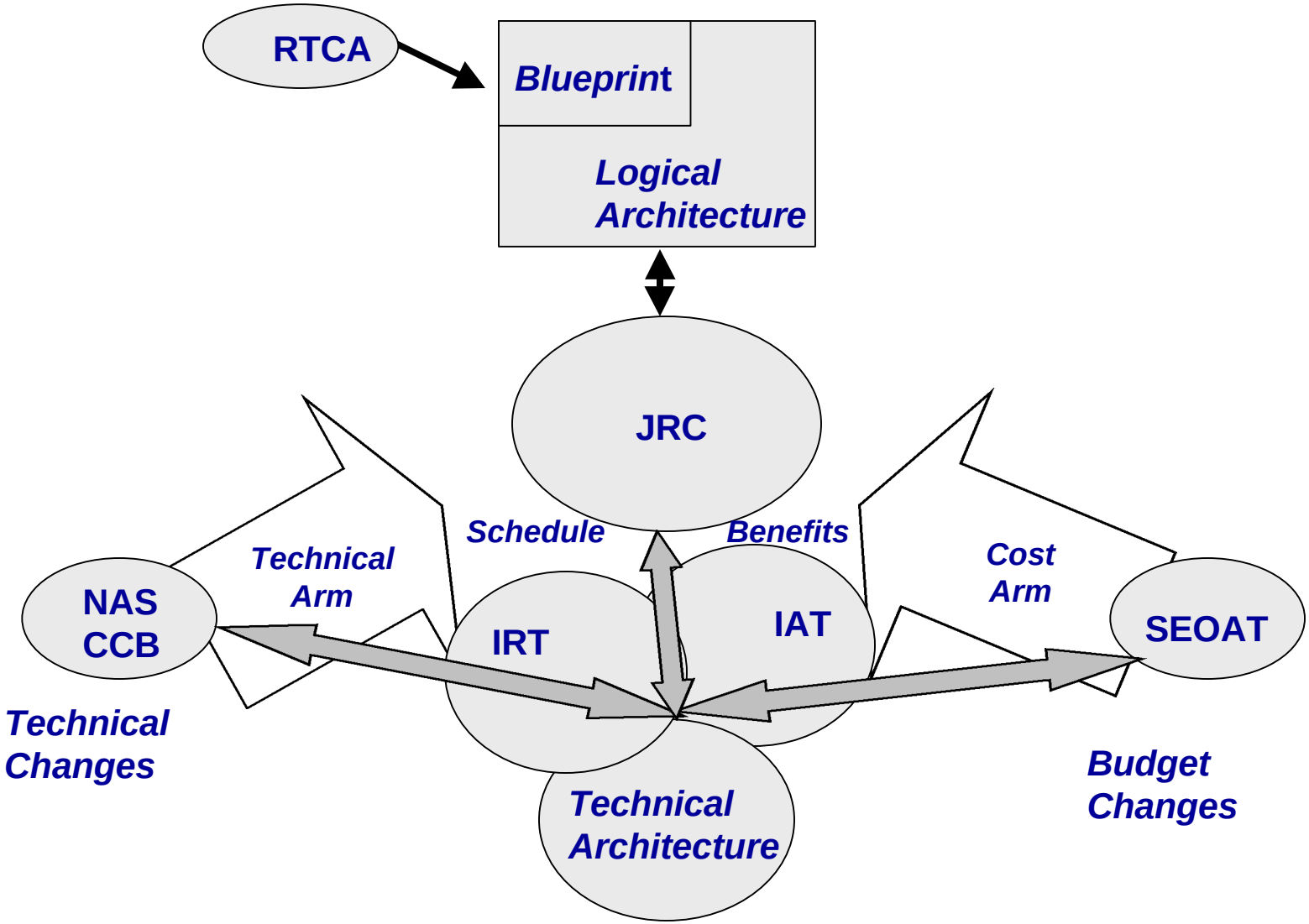
- Project Specs/Documentation
- Technical Instruction Books
- EEM Handbooks
- Maintenance Handbooks

*New
CCB to be established

Relationship of NAS CCB & JRC



Linkage to other Processes



NAS CCB Issues

- *Configuration Items (CIs) for NAS CCB*
- *Transition Strategy from NAS-SR-1000 to the NAS Technical Architecture*
- *Proliferation of unbaselined equipment currently in use*
  - *– CV-4400*
  - *– TARDIS (Terminal Automated Radar Display & Information System)*
- *CM approach for Prototypes*

NAS CCB ROLES

- *Provide technical and administrative direction for properly identifying and controlling change to the NAS-level Baselines*
- *Technical arm of JRC*
- *Baseline Technical Architecture requirements*
- *Baseline IRDs*
- *Adjudicate differences and resolve issues elevated from lower-level CCBs*
- *Ensure traceability of NAS requirements down to IPT-controlled baselines*
- *Adjudicate changes that impact more than one lower level CCB*
- *Provide Agency-wide forum for discussion of technical issues*
- *Approve all Life Cycle Support CCB Charters*
- *Approve and implement the NAS CCB Operating Procedures*
- *Keep NAS Charter current (Appendix A)*

NAS CCB Membership

Proposed Membership

AAF-1	*(Co-chair)*
ASD-1	*(Co-chair)*
*AAF-1**	*(Designee)*
AAT-1	
ACT-1	
*AIO-1**	
AML-1	
AND-1	
*AOZ-1**	
ARS-1	
*ASD-1**	*(Designee)*
ASU-1	
*ATQ-1**	
AUA-1	

** New*

NAS CCB Operating Procedures

- *Provides Details on "How To" execute Roles*
- *Will be revised once Roles & Responsibilities are agreed to in Charter*
- *Approved by NAS CCB*

Discussion & Agreements

- *Membership*
- *Roles & Responsibilities*
- *CIs*
- *Other*

- *Written comments on the Charter & Operating Procedures are due by 6 August- Please send to Avdesh Kaushiva, ASD-220, 358-5569*